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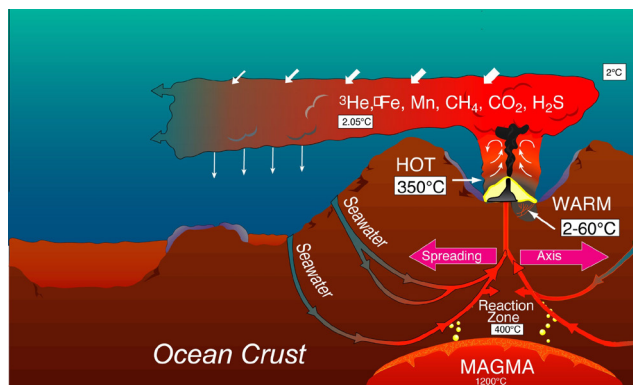
HYDROTHERMAL VENTS

In News

- **Indian oceanographers** using an **Automatic Underwater Vehicle (AUV)** launched from the research vessel **Sagar Nidhi**, captured the first-ever image of an **active hydrothermal vent** located 4,500 meters below the **Indian Ocean's surface**.
 - ♦ The site is significant for mineral exploration under the **Deep Ocean Mission** by the **Ministry of Earth Sciences**.

What is Active Hydrothermal Vent?

- **Seafloor Hot Springs:** They are openings in the ocean floor where geothermally heated water flows out.
- **Tectonic Activity:** They are often found near volcanically active areas, especially mid-ocean ridges where tectonic plates are moving apart.
- **How they form:**
 - ♦ Seawater seeps into cracks in the ocean crust.
 - ♦ It gets superheated by magma beneath the seafloor.
 - ♦ The hot water dissolves minerals from the surrounding rocks.
 - ♦ This mineral-rich, hot water gushes back out into the ocean, forming the vent.
- **Types of Vents:**
 - ♦ **Black Smokers:** Emit very hot water (over 350°C) that's rich in sulfides, making the water appear black.
 - ♦ **White Smokers:** Emit cooler water with lighter-colored minerals like barium, calcium, and silicon.



Why are they important?

- **Unique Ecosystems:** Hydrothermal vents support unique ecosystems that thrive in the absence of sunlight.

- **Chemosynthesis:** Specialized bacteria and archaea use chemicals from the vents (like hydrogen sulfide) to produce energy, forming the base of the food web.
- **Biodiversity:** These ecosystems are home to a variety of unusual creatures, including tubeworms, giant clams, and vent crabs.
- **Origin of Life:** Some scientists believe that life on Earth may have originated in hydrothermal vent environments.

About Deep Ocean Mission

- **Brief:** It is a flagship initiative of the Government of India **launched in 2021** under the **Ministry of Earth Sciences (MoES)**.
- **Aim:** To explore and harness the vast resources of the deep ocean while addressing challenges in oceanography and marine ecosystems.
- **Key Objectives:**
 - ♦ **Exploration of Deep-Sea Resources:** Study and map hydrothermal vents, polymetallic nodules, and cobalt-rich crusts found in the Indian Ocean.
 - ♦ **Development of Technology for Deep-Sea Mining:** Build and deploy advanced equipment and vehicles for mining at depths of up to 6,000 meters.
 - ♦ **Biodiversity and Environmental Studies:** Conduct research on marine ecosystems and unique life forms in deep-sea environments.
 - ♦ **Climate Change and Ocean Observations:** Strengthen India's ability to monitor climate change and its impact on oceans.
 - ♦ **Marine Biotechnology and Drug Development:** Investigate marine organisms for pharmaceutical and industrial applications.

Source: IE

CONCERNS OVER SECTION 6A OF THE CITIZENSHIP ACT

Context

- The Supreme Court's ruling upholding the constitutional validity of **Section 6A**, has raised constitutional concerns, particularly those that impact Assam's indigenous population.

Background

- **Section 6A of the Citizenship Act, 1955**, confers citizenship to immigrants who entered Assam after January 1, 1966 but before March 24, 1971.

- ♦ The provision was inserted into the Act in furtherance of a Memorandum of Settlement called the “**Assam Accord**”.
- Under Section 6A, foreigners who had entered Assam before January 1, 1966, and been “ordinarily resident” in the State, would have all the rights and obligations of Indian citizens.

Concerns raised on the provision

- The **cut-off date provides a different standard for citizenship** for immigrants entering Assam than the rest of India (which is **July 1948**) and violates the right to equality (**Article 14**) of the Constitution.
- Also the provision **violates the rights of indigenous people** from Assam under **Article 29** by changing the demographics in the state.

What is the Assam Accord?

- The Assam Accord was signed in 1985 amongst **Union of India, Govt. of Assam, All Assam Student Union, All Assam Gana Sangram Parishad**.
- To implement the various Clauses of Assam Accord a new Department has been established in the name of “**Implementation of Assam Accord Department**” during the year 1986.
- The Accord set **March 24, 1971**, as a cut-off. Anyone who had come to Assam before midnight on that date would be an Indian citizen, while those who had come after would be dealt with as foreigners.
- The same cut-off was used in updating the **National Register of Citizens (NRC)**.

Supreme Court ruling

- The Court opined that the mere presence of diverse ethnic groups within a state does not, in itself, constitute a violation of **Article 29(1)** of the Constitution (**protection of interests of minorities**).
- Section 6A is a statutory intervention that balances the humanitarian needs of migrants of Indian origin and the impact of such migration on economic and cultural needs of Indian states

Concluding remark

- The judgment underlined parliamentary supremacy over citizenship matters under **Article 11** of the Constitution.
- It also reinforced the Union government's defense of amendments under the **Citizenship**

(**Amendment**) **Act of 2019**, which is presently pending challenge in the Supreme court.

Citizenship Amendment Act (CAA), 2019

- It amended the **Citizenship Amendment Act, 1955**, making two key changes to facilitate citizenship to undocumented migrants belonging to six non-Muslim communities — **Hindu, Sikh, Buddhist, Jain, Parsi or Christian** from **Afghanistan, Bangladesh and Pakistan**, who entered India on or before December 31, 2014.
- It reduced the period to qualify for citizenship from the existing requirement of continuous stay of 11 years to continuous stay of **five years**.
- However, Pakistani Hindus were anyway eligible for citizenship under **Section 5 and Section 6 (1)** of the Citizenship Act, 1955. The CAA only helped fast track the application process.
- The Rules grant the final authority to accord citizenship to an empowered committee headed by the Director, Census Operations, while the scrutiny of applications filed online on the portal was done by a **district level committee (DLC)** headed by Department of Post officials.
 - ♦ On successful verification of documents, the DLCs administered the oath of allegiance to the applicants.

Source: TH

GLOBAL ESTIMATES ON INTERNATIONAL MIGRANT WORKERS :ILO

In News

- Global Estimates on International Migrant Workers report released by the International Labour Organization (ILO).

Major Findings

- **Labor Force** : : In 2022, international migrants made up 4.7% of the global labor force, totaling 167.7 million, an increase of over 30 million since 2013.
 - ♦ Of the 167.7 million migrants, 102.7 million were men and 64.9 million were women.
- **Regional Trends** : :Europe and Central Asia hosted 34.5% of migrant workers (57.8 million).

- ♦ The share of migrants in Northern, Southern, and Western Europe increased from 22.5% in 2013 to 23.3% in 2022, while other regions saw slight declines.
- ♦ More than 68% of migrants were in high-income countries, primarily in Northern, Southern, and Western Europe; North America; and the Arab States.
- **Sector Employment:** 68.4% of migrant workers were employed in the services sector, particularly in care and domestic work, with 30% of migrant women and 12.4% of migrant men in this sector.
- **Comparisons to Non-Migrants:** 19.2% of non-migrant women and 6.2% of non-migrant men were employed in care and domestic work.

Issues and Concerns

- **Higher Unemployment Rates:** Migrants faced a higher unemployment rate (7.2%) than non-migrants (5.2%), with women more affected.
- **Gender Disparities in Employment:** Migrant women had an employment-to-population ratio of 48.1%, compared to 73% for migrant men.
- **Barriers to Employment:** Gender disparities may be driven by factors like language barriers, unrecognized qualifications, discrimination, limited childcare options, and gender-based expectations.

Suggestions

- Migrant workers are crucial in addressing global labour shortages and contributing to economic growth.
- Protecting their rights and ensuring access to decent work is both a moral and economic necessity.
- The report calls for targeted policies to improve access to decent work and protect migrant workers.
- Ensuring equitable access to employment opportunities is vital for sustainable development and inclusive labour markets.

Source: TH

NITI AAYOG RELEASES REPORT ON "S.A.F.E. ACCOMMODATION: WORKER HOUSING FOR MANUFACTURING GROWTH"

Context

- NITI Aayog released a report on "**S.A.F.E. Accommodation - Worker Housing for manufacturing growth**".

About

- The report explores the **crucial role of secure, affordable, flexible, and efficient (S.A.F.E.) accommodations** for industrial workers in boosting **India's manufacturing sector**.
- **It identifies key challenges**, offers actionable solutions, and highlights the pivotal interventions required to scale up such housing facilities across the country.
- **Background:**
 - ♦ In the Union Budget 2024-25, the Finance Minister emphasized the **importance of rental housing** for industrial workers.
 - ♦ This initiative, to be executed under a **Public-Private Partnership (PPP) model with Viability Gap Funding (VGF)**.

India's Manufacturing Sector

- India is poised to elevate its manufacturing sector's contribution to GDP from the **current 17% to 25%** as part of achieving **Viksit Bharat by 2047**.
 - ♦ This goal is aligned with the country's objectives of becoming a **global manufacturing hub**.
- **Future Outlook:**
 - ♦ According to the Economic Survey 2023-24, India needs to generate 7.85 million jobs annually until 2030 to sustain its economic growth trajectory.
 - ♦ This also requires a robust workforce strategy, including sufficient, proximate, and affordable housing for industrial workers.

SAFE

- The S.A.F.E. accommodation initiative offers a **comprehensive framework by aligning regulatory and financial frameworks**.
- **The report identifies several benefits of S.A.F.E.:**
 - ♦ **Enhancing Workforce Productivity and Retention:** Proximate and well-designed housing improves workers' quality of life, reduces commute times, and enhances overall productivity.
 - ♦ **Attracting Global Investments:** High-quality accommodations demonstrate India's commitment to international standards, thereby making the country a preferred destination for manufacturing investments.
 - ♦ **Aligning with Global Labour Standards:** Adherence to international labour

standards enhances India's reputation and competitiveness in the global market.

Challenges in Scaling Up Worker Accommodation

- **Restrictive Zoning Laws:** Residential developments are often prohibited in industrial zones, forcing workers to live far from their workplaces.
- **Conservative Building Bye-Laws:** Low Floor Area Ratios (FAR) and other inefficient land-use regulations limit the potential for high-capacity housing on available land.
- **High Operating Costs:** Hostel accommodations in industrial zones are classified as commercial establishments, leading to higher property taxes and utility rates. **Financial Viability:** High capital costs and low returns make large-scale worker accommodation projects unattractive to private developers.

Proposed Solutions:

- **Reclassify Worker Accommodations:** Designate S.A.F.E. accommodations as a distinct category of residential housing to ensure:
 - ♦ Residential property tax, electricity, and water tariffs apply.
 - ♦ GST exemptions for accommodations meeting specified criteria.
- **Streamline Environmental Clearances:** Include S.A.F.E. accommodations under the exemptions provided for industrial sheds, schools, colleges, and hostels.
- **Flexible Zoning Laws:** Amend zoning regulations to allow mixed-use developments near industrial hubs, facilitating worker housing close to workplaces.
- **Viability Gap Funding (VGF):**
 - ♦ Provide up to 30%-40% of project costs (excluding land) through VGF support.
 - ♦ Amend Annexure 3 of the VGF scheme to include affordable rental housing as an eligible sector.
- **Competitive Bidding:** Implement transparent bidding processes to determine VGF support, ensuring efficiency and cost-effectiveness.

Conclusion

- The provision of S.A.F.E. accommodation is not merely a welfare initiative but a strategic imperative for India's economic growth.
- It addresses critical challenges in workforce retention, productivity, and global

competitiveness, while fostering sustainable urban development.

Source: PIB

EFFORTS TO MAKE 'VIKSIT BHARAT' BY 2047

Context

- India has been making several efforts through key interventions in the field of Science and Technology towards achieving '**Viksit Bharat**' 2047 Goal.

India's Vision 2047: Viksit Bharat

- **India's vision for 2047**, known as 'Viksit Bharat' (Developed India), aims to transform the nation into a developed economy by the time it celebrates its 100th anniversary of its independence.
- Achieving this ambitious goal requires comprehensive efforts across various sectors, with science and technology playing a pivotal role.

Agenda of Viksit Bharat by 2047

- It is a comprehensive vision plan aiming to transform India into a developed nation by the year 2047, marking the 100th anniversary of its independence.
- The **four pillars of Viksit Bharat** are *Yuva (Youth)*, *Garib (Poor)*, *Mahila (Women)* and *Kisan (Farmers)*.
- It requires comprehensive efforts across various sectors, including **economic growth, social equity, global competitiveness, environmental sustainability, industrial modernization and good governance**.

Efforts Made in Key Sectors

- **Economic Growth:** India has **set a target of a 7-8% annual GDP growth rate** to achieve sustained economic growth.
 - ♦ According to **NITI Aayog**, the country's GDP is **projected to reach \$30 trillion** by 2047, which hinges on the assumption that **India's real GDP** will grow at an annual average rate of over **9%**.
 - ♦ Initiatives like the **Make in India** and **Aatmanirbhar Bharat (Self-Reliant India)** programs promote domestic manufacturing and reduce import dependency.

- ♦ The **Production Linked Incentive (PLI) schemes** provide financial incentives to key sectors such as electronics, pharmaceuticals, and textiles.
- **Social Equity:** Efforts to eradicate poverty, provide universal healthcare, and ensure quality education are underway.
 - ♦ Programs like the **Pradhan Mantri Garib Kalyan Anna Yojana (PMGKAY)**, which provides free food grains to the poor, and the **National Education Policy (NEP) 2020**, which reforms the education system, are key components of this strategy.
- **Industrial Modernization:** Boosting manufacturing to contribute 25% to GDP under the Make in India initiative is a key goal.
 - ♦ The **Maritime India Vision 2030** and **Amrit Kaal Vision 2047** aim to develop the maritime sector, including ports, shipping, and waterways.
 - ♦ Efforts to modernize port operations, develop green hydrogen/ammonia hubs, and promote cruise tourism are part of this strategy.
- **Global Competitiveness:** The **PM Gati Shakti Master Plan** integrates infrastructure projects across sectors to expedite development.
 - ♦ The **Digital India** initiative expands internet access and boosts fintech adoption, supporting e-governance and digital services.
- **Environmental Sustainability:** India has set a target to achieve net-zero emissions by 2070 and enhance renewable energy adoption.
 - ♦ Initiatives like the **Green India Mission** focus on renewable energy and sustainable urban development.

Efforts Made in Science & Technology

- **High-Stakes Mission-Driven Initiatives** like **National Quantum Mission** and the **National Mission on Interdisciplinary Cyber-Physical Systems**, focussing on positioning India as a global leader in emerging technologies.
- **Strategic Policy Measures:** These include the **Geospatial Policy 2022**, the **Space Policy 2023**, and the **BioE3 (Biotechnology for Economy, Environment, and Employment) Policy 2024**.
 - ♦ These policies aim to enhance India's technological capabilities and promote sustainable development.
- **Global Leadership in Science and Technology:** India **ranks 3rd** in terms of number of research publications as per **Science & Engineering Indicators 2024** published by **National Science Foundation (NSF), USA**.
 - ♦ India **ranks 4th** in the **number of PhD degrees** awarded in Science and Engineering as per **Science & Engineering Indicators 2024** published by **National Science Foundation (NSF), USA**.
 - ♦ India is **ranked at 6th position** both in terms of resident and non-resident patent filing activity from respective countries as per **WIPO Report, 2023**.
- **Gross Expenditure on R&D (GERD) in India:** GERD in India has been consistently increasing over the years and has **more than doubled from 2009-10 to 2020-21**.
 - ♦ As per DST R&D Statistics 2022-23, India occupies **7th position** in terms of GERD (in billion current PPP\$) **ahead of United Kingdom, Russia, Brazil, Italy, Canada, Spain, Australia, etc**
 - ♦ **Gender participation in R&D** has increased to 18.6% (2021) from 14.3 % (2009) as per DST R&D Statistics, 2022-23.
 - ♦ The **number of researchers per million population** has increased to 262 in 2020 as compared to 164 in 2009 as per DST R&D Statistics, 2022-23.
- **Startup Culture and Innovation Ecosystem:** India has witnessed a **significant jump in its Global Innovation Index (GII)** ranking from 81st in the year 2015 to **39th in 2024** among 133 economies of the world.
 - ♦ India also **ranked 3rd** in terms of the **total number of startups** in 2024 as per DPIIT.
- **Anusandhan National Research Foundation (ANRF):** It was established through the **ANRF Act 2023** that aims to drive a multi-phased roadmap for scientific breakthroughs and cross-sectoral collaboration, providing competitive, peer-reviewed grants to optimize resource allocation for high-impact research.
- **Sectoral Group of Secretaries (SGoS) on Technology:** It has held detailed discussions to identify key areas for intervention.
 - ♦ These discussions have resulted in strategic actions to strengthen research and innovation in areas such as **Quantum Technologies, Cyber-Physical Systems, and Bio Manufacturing**.

Challenges and Way Forward

- Despite these efforts, challenges such as **economic inequalities, infrastructure gaps, policy uncertainty, concerns related to environment, skill development, rural youth and global risks** remain.
- Addressing these challenges requires consistent fiscal and monetary policies, skill development, boosting exports, rural development, and scaling up renewable energy capacity.

Source: PIB

IPBES NEXUS REPORT: INTERLINKING CLIMATE, BIODIVERSITY, AND HUMAN WELL-BEING

Context

- The Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) released the Nexus Report.

Key Highlights of the Report

- **Biodiversity loss threatens food, water, health, and climate systems:** Over the last 30-50 years, biodiversity has declined by an **average of 2-6%** each decade
- **Trade-offs between food security and other nexus elements:** Six nexus scenario archetypes are developed to assess how the five nexus elements – biodiversity, water, food, health and climate – will interact with each other.
- **Restoring nature for climate mitigation and adaptation:** Techniques like reforestation, wetland restoration, and sustainable land management provide co-benefits for biodiversity restoration and climate action.
- **Reforming global financial systems:** The report highlights a **\$300 billion to \$1 trillion** annual funding gap for biodiversity.
 - ♦ Current economic systems fail to account for externalities of biodiversity loss, imposing unaccounted costs of **\$10-25 trillion** annually.

What are the recommendations?

- **Economic opportunities:** Transitioning to sustainable approaches can create over **\$10 trillion** in economic opportunities and generate **400 million** jobs by 2030.
- **Harmonizing responses:** Policies addressing food systems, climate action, and biodiversity

conservation should maximize synergies and avoid trade-offs.

- **Reforming financial systems:** Incentivizing nature-positive investments is crucial to close biodiversity funding gaps and achieve the **Sustainable Development Goals (SDGs)**.

Conclusion

- The IPBES Nexus Assessment highlights the need for integrated policymaking to address interconnected challenges of climate change, biodiversity loss, and food, water, and health security.
- The report underscores the importance of restoring nature, transitioning to sustainable food systems, reforming economic structures, and bridging the biodiversity funding gap.

About IPBES

- **Established in 2012**, IPBES assesses the state of biodiversity and ecosystem services globally.
- **IPBES does not produce new scientific research** but evaluates existing knowledge to provide consolidated assessments for policymakers.

Source: IE

NEWS IN SHORT

NATIONAL TANSEN SAMMAN

Context

- Renowned tabla player of Indian classical music Pt. Swapan Choudhary of Kolkata was honoured with the “National Tansen Samman” for the year 2023.

About National Tansen Samman

- Established in: **1980**.
- An honorarium of five lakh rupees, citation plaque and shawl-shripahal was presented.
- The award is established by the **Madhya Pradesh government in the name of Music Emperor Tansen**, awarded in the field of Indian classical music.

Tansen

- Tansen (16th Century) was a legendary **Indian classical musician** and one of the “**Navaratnas**” (nine jewels) in the court of the **Mughal Emperor Akbar**.

- He was a disciple of the great musician **Swami Haridas** and is often credited with bringing the dhrupad style of music to prominence.
- Tansen is known for his mastery of **Hindustani classical music** and for his contributions to the development of **several ragas**.
- Tansen was honored with the **prefix 'Miyan' from Emperor Akbar** and from that day onwards he came to be known as MiyanTansen.

Source: AIR

GOA LIBERATION DAY

Context

- Goa Liberation Day is celebrated every year on **December 19** to mark the freedom of Goa from Portuguese rule in **1961**.

Background

- The Portuguese arrived in Goa under **Afonso de Albuquerque in 1510**, making it one of their longest-held overseas territories.
- While India gained independence in 1947, Goa, along with Daman and Diu, remained under Portuguese control.

Operation Vijay

- It was the code name for the military action undertaken by India to liberate Goa.
- The operation began on December 17, 1961, and lasted for two days.
- On December 19, 1961, the Portuguese Governor-General **Manuel Antonio Vassalo e Silva** surrendered to Indian forces.

Integration into India

- After liberation Goa, Daman, and Diu were declared a Union Territory.
- **In 1987**, Goa was granted statehood, becoming the **25th state** of India.
 - ♦ However, Daman and Diu continue to remain Union Territories.

Source: BS

VANUATU

In News

A massive earthquake of magnitude of 7.3 struck the coast of Vanuatu

Vanuatu

- It is an island country in the South Pacific Ocean.

- It is an archipelago about 800 km west of Fiji and 1,770 km east of Australia.
 - ♦ It is home to 320,000 people
- It is situated along the seismic Ring of Fire, an arc of high tectonic activity that runs across the Pacific basin and across Southeast Asia.

Source :HT

IMPEACHMENT OF VICE PRESIDENT

Context

- Deputy Chairman of Rajya Sabha, rejected the Opposition's no-confidence motion against Vice President Jagdeep Dhankhar.

About

- **No-Confidence Motion** is a formal proposal or resolution moved in a legislative body to express disapproval of a particular individual or the government.
- The move was initiated under **Article 67(b)** of the Constitution, which provides for the removal of the Vice President, who also serves as the **ex-officio Rajya Sabha**.

Constitutional Provisions for Removal

- **Under Article 67(b)**, the Vice President can be removed through a resolution passed by a **majority in the Rajya Sabha** and subsequently agreed upon by the **Lok Sabha**.
 - ♦ **A 14-day notice** is mandatory before such a resolution can be moved.
- **Article 92** of the Constitution bars the Chairman or Deputy Chairman from presiding over proceedings during the consideration of a resolution for their removal.
 - ♦ However, they are permitted to **participate in the debate, but not vote** on the resolution.

Source: TH

YUGA YUGEN BHARAT NATIONAL MUSEUM

Context

- India and France signed a Memorandum of Understanding (MoU) for the development of the new National Museum named **Yuga Yugen Bharat National Museum**.

About

- The project is an integral part of the **Central Vista Redevelopment Project** and is set to be developed at the and South Blocks of Parliament.

- **Features:**

- ♦ It will be developed through **Adaptive Reuse**, in collaboration with France, renowned for its expertise.
- ♦ Its development will renew the historic North and South Blocks, **preserving their unique architectural features**.
- ♦ It is expected to be the **largest museum in the world**, surpassing **The Louvre in Paris, which is the world's biggest**.

- **The project will be implemented in two phases.**

- ♦ The first phase will involve retrofitting the North Block into a museum space, with a targeted completion by 2026.

Central Vista Redevelopment Project

- **Announced in:** 2019.
- **Ministry:** Ministry of Housing and Urban Affairs.
- **Aim:** Redevelopment project to give a new identity to the 'power corridor' of India.
- The **plan included** the construction of a new parliament, prime minister and vice-president's residences along with 10 building blocks that will accommodate all government ministries and departments.

Source: TH

NANO-PLASTICS AGENTS OF AMR

Context

- As per a new study, Nanoplastics derived from single-use plastic bottles (SUPBs) contribute to the spread of **antibiotic resistance (AR)**.

About

- **Nanoplastics:**

- ♦ They are tiny plastic particles, typically **smaller than 5 millimetres in diameter**, that result from the breakdown of larger plastic items.
- ♦ **Due to their small size**, they can easily enter ecosystems, water supplies, and the food chain, posing environmental and health risks.

- **Antibiotic Resistance:**

- ♦ Antibiotic resistance occurs when **bacteria evolve to resist** the effects of medications that once killed them or inhibited their growth.
- ♦ **Causes:** This happens due to overuse or misuse of antibiotics, such as unnecessary prescriptions, incomplete courses of treatment, or overuse in agriculture.

- ♦ **Implications:** Infections become harder to treat, leading to longer illnesses, increased healthcare costs, and higher mortality rates.

- **Study:**

- ♦ Nanoplastics might introduce AR genes to beneficial gut bacteria like *Lactobacillus acidophilus*.
- ♦ It indicates that *Lactobacillus acidophilus* could act as reservoirs for AR genes, potentially transferring these genes to pathogenic bacteria during the course of infections.

- The finding highlights the need for **responsible usage of plastics and its adequate waste management** to safeguard human health and microbiome stability.

Source: PIB

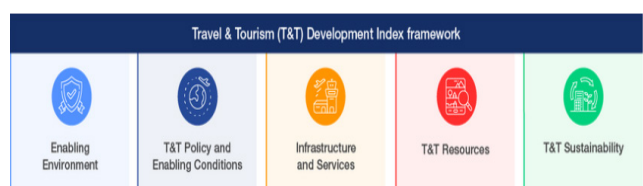
TRAVEL AND TOURISM DEVELOPMENT INDEX (TTDI) 2024

In News

- India is ranked 39th among 119 countries in the 2024 Travel and Tourism Development Index (TTDI) report by the **World Economic Forum (WEF)**.

Travel and Tourism Development Index (TTDI) 2024

- Introduced in 2022, TTDI is an evolution of the Travel & Tourism Competitiveness Index (TTCI), which has been published biennially since 2007.



- **Features:** It serves as a strategic benchmarking tool for businesses, governments, and organizations to develop the Travel & Tourism (T&T) sector.
 - ♦ It measures the factors and policies that enable sustainable and resilient T&T development, contributing to a country's development.
 - ♦ It allows for cross-country comparison and benchmarking on T&T development, informing policies and investment decisions for the sector.
- **Importance:** It offers insights into the strengths and areas for improvement of each country to enhance sustainable and resilient T&T growth.

- ♦ It provides a comprehensive view of the tourism economy, including both internal and external enablers of T&T development and their interconnectedness.
- **Findings of 2024 Index :**

Rank	Economy	Score ²	Change since 2019 ³		Diff. from TTDI Avg. (%)
			Rank	Score	
1	United States	5.24	0	-0.5%	32.3%
2	Spain	5.18	0	0.9%	30.6%
3	Japan	5.09	0	-0.3%	28.5%
4	France	5.07	2	0.8%	28.0%
5	Australia	5.00	2	0.8%	26.0%

Source :PIB

MARINE HEAT WAVE

Context

- A **marine heatwave** nicknamed ‘**The Blob**’ in Alaska from **2014-2016**, led to the death of an estimated **4 million common murre**.

About Common Murre

- **The common murre (Uria aalge)** is a species of seabird found in the **Northern Hemisphere**, particularly in the cold waters of the **North Atlantic and North Pacific Oceans**.

- **Characteristics:** They have **black and white plumage** like penguins, with a black head, back, and wings, a **white belly**, and a long, **slender, pointed black beak**.
- They use their wings to “fly” underwater and can dive as deep as **100 meters (330 feet)**.
- **Diet:** They feed on small fish like capelin, herring, and sand lance.
 - ♦ The heatwave caused a collapse in fish stocks and plankton, leading to food scarcity.



Source: NY Times